

- A1
2. (Amended) An isolated polynucleotide selected from the group consisting of (a) a polynucleotide having the sequence as shown in FIG. 1 (SEQ ID NO. [XX] 1), wherein T can also be U; (b) a polynucleotide encoding a 20P1F12/TMPRSS2 polypeptide whose sequence is encoded by the cDNA contained in plasmid p20P1F12-GTC1 as deposited with American Type Culture Collection as Accession No. 207097; and (c) a polynucleotide encoding the 20P1F12/TMPRSS2 protein of claim 1.

16. (Amended) An assay for detecting the presence of a 20P1F12/TMPRSS2 polynucleotide in a biological sample, comprising

(a) contacting the sample with a polynucleotide probe which specifically hybridizes to the 20P1F12/TMPRSS2 cDNA contained within plasmid p20P1F12-GTC1 as deposited with American Type Culture Collection as Accession No. 207097, or the polynucleotide as shown in FIG. 1 (SEQ ID NO. [XX] 1), or the complements thereof; and

(b) detecting the presence of a hybridization complex formed by the hybridization of the probe with 20P1F12/TMPRSS2 polynucleotide in the sample, wherein the presence of the hybridization complex indicates the presence of 20P1F12/TMPRSS2 polynucleotide within the sample.

- A2
17. (Amended) An assay for detecting the presence of 20P1F12/TMPRSS2 mRNA in a biological sample comprising:

(a) producing cDNA from the sample by reverse transcription using at least one primer;

(b) amplifying the cDNA so produced using 20P1F12/TMPRSS2 polynucleotides as sense and antisense primers to amplify 20P1F12/TMPRSS2 cDNAs therein;

(c) detecting the presence of the amplified 20P1F12/TMPRSS2 cDNA,

wherein the 20P1F12/TMPRSS2 polynucleotides used as the sense and antisense probes are capable of amplifying the polynucleotide shown in FIG. 1 (SEQ ID NO. [XX] 1).